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THE BRACHYURA OF THE SECOND TEMPLETON CROCKER-AMERICAN MUSEUM EXPEDITION TO THE PACIFIC OCEAN

BY MELBOURNE WARD[1]

This expedition, the second undertaken by The American Museum of Natural History in the yacht, "ZACA," through the generosity of Mr. Templeton Crocker of San Francisco who accompanied it, was led by Dr. Roy Waldo Miner, Curator of Living Invertebrates of that Museum, for the purpose of studying pearl shell on the lagoon floor of the Island of Tongareva, otherwise known as Penrhyn Island. During the course of the expedition a large collection of marine invertebrates and fishes was made. These were obtained, first, by night surface collecting during the voyage; second, by shore collecting around the borders of the lagoon at Tongareva and back of reefs at Tutuila, American Samoa and Savaii, British Samoa; third, by lagoon bottom collecting through skin diving and by use of the diving helmet; fourth, by breaking up dead corals, mainly from the reefs of Savaii, to obtain the specimens lurking in the crevices.

The personnel of the expedition from the Department of Living Invertebrates in The American Museum of Natural History comprised, besides Dr. Miner: Mr. Wyllys Rosseter Betts, Jr., Field Associate; and Mr. Chris Olsen, artist. The greater part of the material was collected by them. Contributions to the collections were also made by Mr. Crocker; Mr. William F. Coultas, ornithologist; Toshio Asaeda, artist; and various members of the crew.

The region visited by the Crocker Expedition included Tongareva (Penrhyn); Tutuila and Savaii Islands, Samoa; and Hawaii; all of which may be said to belong to the Central Pacific Zoögeographical Region. In studying the Crocker material I have utilized collections from other parts of the Indo-Pacific for comparative purposes, with the result that I consider the Central Pacific to be a distinct faunal region, and in recording references to literature I have quoted only original descriptions and figures, with occasional papers which add relevant details to older species.

The Crocker collection of Brachyura comprises five hundred and forty-seven specimens distributed in thirty-four genera and forty-nine species; three of which appear to be new to science; there are also three new subspecies. Four new names are suggested for species of older authors. Also, there are three lots of megalopa larvae of crabs which I have not been able to determine specifically; these are being returned to The American Museum of Natural History. The types of the new species are in that Museum.

I wish to express my thanks to Dr. Roy Waldo Miner for allowing me the privilege of studying this collection; and to Dr. Willard G. Van Name, Associate Curator of the Department of Living Invertebrates, for his courtesy and coöperation; and to the following list of fellow workers who have greatly assisted me by exchanging collections: Dr. M. J. Rathbun, National Museum, Washington; Mr. M. W. F. Tweedie, Raffles Museum, Singapore; Mr. R. Viader and Mr. G. Antelme, Mauritius; Dr. B. Chopra, Indian Museum; Dr. C. H. Edmondson, Bishop Museum, Hawaii; Dr. P. E. P. Deraniyagala, Colombo; Steve Glassell, Los Angeles; Dr. I. Gordon, British Museum.

[1] F.R.Z.S., F.Z.S., Honorary Zoologist Australian Museum, Sydney, Honorary Collector, Queensland Museum, Brisbane.

ORDER DECAPODA

SUBORDER REPTANTIA

TRIBE BRACHYURA

SUBTRIBE BRACHYGNATHA

SUPERFAMILY OXYRHYNCHA

Maiidae

Schizophrysinae

SCHIZOPHRYS WHITE

Schizophrys WHITE, 1848, Ann. Mag. Nat. Hist., (2) X, p. 282.

LOGOTYPE.—Specified by Miers, 1879: *S. serratus* White = *S. aspera* (H. Milne-Edwards).

TYPE LOCALITY.—Unknown.

Schizophrys aspera (H. Milne-Edwards)

Mithrax aspera H. MILNE-EDWARDS, 1831, Mag. d. Zool., classe VII (no pagination in my copy).

M. aspera H. MILNE-EDWARDS, 1834, Hist. Nat. Crust., I, p. 320.

Schizophrys aspera A. MILNE-EDWARDS, 1872, Nouv. Arch. Mus. Hist. Nat. Paris, VIII, p. 231, New Caledonia.

MATERIAL.—One male 8 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa (eastern reef), Oct. 15, 1936, from broken coral heads.

Parthenopidae

Parthenopinae

PLATYLAMBRUS STIMPSON

Platylambrus STIMPSON, 1871, Bull. Mus. Comp. Zoöl., II, p. 129.

Platylambrus RATHBUN, 1925, Bull. 129, U. S. Nat. Mus., p. 516.

HAPLOTYPE.—*P. serratus* (H. Milne-Edwards). West Indies.

Platylambrus ursus, new species

Figures 1 and 2

Small species entirely covered with shaggy tomentum. Carapace broadly triangulate, the median regions with equal-sized spinose granules. The anterolateral margins are curved, armed with short, broad, flat spines. The posterolateral margins are concave, with a broad blunt spine in the middle. The posterior margins are armed on each side with a short conical spine.

The rostrum is broad, well developed and tridentate, the median tooth is the largest, the other two are small and laterally directed. The supra-orbital eave is without spines and there are indications of two fissures toward the lateral angles. The orbits are open below. The epistome is large, smooth and bare. The external maxillipeds close the buccal frame, and are covered with a thick coat of shaggy tomentum.

The chelae are subequal; the merus is armed with two large spines on the anterior border. The carpus is small with a few scattered spines on the outer surface. The manus is trigonal in cross section; the inner and lower surfaces are free of tomentum. The upper surface has a strongly developed carinate ridge extending longitudinally near the outer margin. The inner margin is armed with irregular spines; smaller spines of similar form are along the outer margin. The external surface is rough with a longitudinal row of spinules well spaced and extending from the carpal articulation almost to the gape. The fingers are short and curved downward.

The ambulatory legs are slender and bare.

The sternum of the male is densely tomentose.

MATERIAL.—Holotype male (Cat. No. A.M.N.H. 7466), 7 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa (eastern reef), Oct. 15, 1936, from broken up coral heads.

SUPERFAMILY BRACHYRHYNCHA

Portunidae

Podophthalminae

PODOPHTHALMUS LAMARCK

Podophtalmus LAMARCK, 1801, Syst. Anim. s. Vert., p. 152.

HAPLOTYPE.—*Podophthalmus spinosus* Lamarck, 1801 = *Portunus vigil* Fabricius, 1798, Indian Ocean.

In 1801 spelled *Podophtalmus* but later *Podophthalmus*.

Podophthalmus vigil (Fabricius)

Portunus vigil FABRICIUS, 1798, Entom. Syst., Suppl., p. 363.

Podophthalmus spinosus LATREILLE, 1806, Gen. Crust. Insect., I, p. 25, Pl. I and Pl. II, fig. 1. (Loc.: Malabar.)

Podophthalmus vigil RATHBUN, 1906, Bull. U. S. Fish Comm. for 1903, part III, p. 875. (Loc.: Hawaii.)

MATERIAL.—Ten males from 8 to 27 mm. in maximum carapace width. Pago Pago Harbour, Samoa, Oct. 9, 10, mid-bay, 20 fms.; and at Apia Harbour, Upolu, Samoa, Oct. 12, at anchorage.

Thalamitinae

THALAMITA LATREILLE

Thalamita LATREILLE, 1829, in Cuvier, Reg. Anim., IV, p. 33 (footnote).

HAPLOTYPE.—*Thalamita admete* (Herbst) = *Cancer admete* Herbst, 1803.

I have seen only the McMurtrie translation, 1831; the single species mentioned is *T. admete* (Herbst).

Thalamita spinimana Dana

Thalamita spinimana DANA, 1852, U. S. Explor. Exped., Crust., I, p. 283; 1855, Atlas, Pl. XVII, fig. 8. (Loc.: Fiji.)

MATERIAL.—Two females 44 and 46 mm. in maximum carapace width. Penrhyn Island, ocean side, in tide pool, Sept. 22, 1936, and Mataatu Harbour, Savaii Island, Samoa, Oct. 18, 1936, in broken up coral from a depth of 6 feet.

THALAMITOIDES A. MILNE-EDWARDS

Thalamita (*Thalamidoides*) A. MILNE-EDWARDS, 1869, Nouv. Arch. Mus. Hist. Nat. Paris, V, p. 146.

LOGOTYPE.—*Thalamitoides quadridens* A. Milne-Edwards, from Madagascar, by present designation.

Thalamitoides alphonsei, new name

Figures 3 and 4

Thalamitoides quadridens A. MILNE-EDWARDS, 1869, (part), Nouv. Arch. Mus. Hist. Nat. Paris, V, p. 149, Pl. VI, fig. 15. (Loc.: Upolu, Samoa.)

A. Milne-Edwards described *Thalamitoides quadridens* from a small specimen 14 mm. long from Madagascar and noted the presence of specimens from Upolu, which he believed to be conspecific, in the Godeffroy Museum. However, he figured both the Madagascar and Upolu material and, after careful examination of his figures and in consideration of the wide geographical separation of his material, I have deemed it advisable to restrict the *T. quadridens* to the Madagascar species and suggest *T. alphonesi* for the Samoan species.

MATERIAL.—One male 13 mm. and one female 15 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, Oct. 17, 1936, from broken up corals brought from a depth of 8 feet.

CARUPA DANA

Carupa DANA, 1852, Ann. Journ. Sci., (2) XII, p. 129, and U. S. Explor. Exped., Crust., I, p. 279.

HAPLOTYPE.—*Carupa tenuipes* Dana, 1852, from the Paumotu Archipelago.

Carupa tenuipes Dana

Carupa tenuipes DANA, 1852, Ann. Journ. Sci., (2) XII, p. 129; 1852, U. S. Explor. Exped., Crust., I, p. 279; 1855, Atlas, Pl. XVII, figs. 4*a*–4*e*.

MATERIAL.—One male 9 mm. in maximum carapace width. Eastern reef, Mataatu Harbour, Savaii Island, Samoa, Oct. 15, 1936.

GONIOCAPHYRA DE MAN

Goniocaphyra DE MAN, 1888, Archiv f. Naturges., Jahrg. 53, p. 339.

HAPLOTYPE.—*Goniocaphyra truncatifrons* de Man, 1888, from Insel Noordwachter.

Goniocaphyra truncatifrons de Man

Goniocaphyra truncatifrons DE MAN, 1888, Archiv f. Naturges., Jahrg. 53, p. 339, Pl. XIV, fig. 1.

MATERIAL.—Three males from broken up coral brought from a depth of 8 feet, 6 and 9 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, Oct. 19, 1936.

ACHELOUS DE HAAN

Achelous DE HAAN, 1833, Crust.: in Siebold, Fauna Japonica, pp. 3, 8.

HAPLOTYPE.—*A. spinimanus* (Latreille) from the coasts of Brazil.

Achelous speciosus (Dana)

Amphitrite speciosus DANA, 1852, U. S. Explor. Exped., Crust., I, p. 276; 1855, Atlas, Pl. XVII, figs. 1*a*–1*d*. Fiji.

MATERIAL.—One female, 7.5 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa (eastern reef), Oct. 15, 1936.

MONOMIA GISTEL

Monomia GISTEL, 1848, Naturg. Thierr. Schullen, p. viii. New name for:

Amphitrite DE HAAN, 1833, in Siebold, Fauna Japonica, Crustacea, pp. 3, 8. Not *Amphitrite* Müller, 1772 (C.D.S.).

LOGOTYPE.—*Amphitrite gladiator* (Fabricius). (Rathbun, 1930, Bull. U. S. Nat. Mus., Washington, 152, p. 33.)

TYPE LOCALITY.—Tranquebar.

Monomia samoensis, new species

Figures 5 and 6

Carapace broader than long, 16 by 8.5 mm., slightly convex and covered with fine, short pubescence which does not hide the patches of granules upon the areas.

The anterolateral margins are long and with eight spines, excluding the external orbital angle, the last tooth is greatly enlarged and slightly curved upward and forward, the rest of the teeth are equal in size.

The posterolateral margins are short, curved and defined by a thin and entire ridge which extends from the tip of the spine almost to the raised edge of the epimeral walls of the carapace.

The posterior margin of the carapace is raised and curved at the lateral angles.

The front is quadridentate, the submedian pair of teeth are the largest and are rounded; the median pair are small, subacute and separated by a narrow V-shaped fissure.

The orbits have a decided dorsal inclination, two indistinct fissures in the upper border; the external angle is a broad acute tooth, a broad V-shaped incision in the lower border just below the external angle of the orbit.

The antenna stands in the orbital hiatus. The antennules are large and fold transversely.

The external maxillipeds are large, the anterolateral angle of the merus is short, narrow and auriculate.

The chelipeds are subequal; the merus is armed on the posterior margin with two well-developed curved spines, one at the distal extremity; four similar spines are placed upon the anterior margin; the carpus is compressed, triangulate, the outer and inner angles are spinate; there is a third spine at the articulation with the manus. The manus is finely granulated, with a very pronounced entire carina extending longitudinally along the outer surface in line with the gape, but ending abruptly at both ends before reaching either the gape or the proximal articulation. The upper border is raised into a thin carina which ends distally in an acclivous spine, several lesser ridges occur on the outer surface. Both fingers are deeply sulcated; the teeth are tricuspidate and very small.

The ambulatory legs are slender. The sternal surfaces are shining but finely granulated. The carina across the abdomen of the male is well developed, sinuous.

Amphitrite samoensis differs from *A. gladiator* (Fabricius) in the following characters:

1.—The form of the teeth of the front, the outer pair being much more enlarged in *A. samoensis.*

2.—The anterolateral margins are more acutely curved in *samoensis.*

3.—The last spine of the anterolateral margin is much more elongate in *A. samoensis.*

4.—The posterolateral margins of the carapace are much shorter in *A. samoensis.*

MATERIAL.—Holotype (Cat. No. A.M. N.H. 7482), 15.5 mm. in maximum carapace width. Pago Pago Harbour, Samoa, on the surface, Oct. 5, 1936.

Xanthidae[1]

CARPILIUS LEACH

Carpilius LEACH, 1828, in Desmarest, Dict. Sci. Nat., XXVIII, p. 228.

LOGOTYPE.—Specified by Rathbun, 1930: *Carpilius maculatus* Fabricius = *Cancer maculatus* Linnaeus, 1758.

TYPE LOCALITY.—Asia.

Carpilius convexus (Forskål)

Cancer convexus FORSKÅL, 1775, Descr. Animal, p. 88. (Loc.: Red Sea.)

Carpilius convexus ALCOCK, 1898, Journ. Asiat. Soc. Bengal, LXVII, part 2, p. 80. (Loc.: Andamans and Nicobar.)

I have not been able to compare this material with specimens from the Red Sea.

MATERIAL.—One male 26 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa (eastern reef). Collected from broken up coral heads, Oct. 15, 1936.

CARPILODES DANA

Carpilodes DANA, 1851, Amer. Journ. Sci., (2) XII, p. 126.

Carpilodes DANA, 1852, U. S. Explor. Exped., Crust., I, p. 192.

Carpilodes ODHNER, 1924, K. Vet. Vitt. Sam. Handl., XXIX, No. 1, p. 8.

HAPLOTYPE.—*C. tristis* Dana, from the Paumotu Archipelago.

Carpilodes bellus (Dana)

Actaeodes bellus DANA, 1852, U. S. Explor. Exped., Crust., I, p. 196. (Loc.: Tutuila and Upolu, etc.)

Carpilodes bellus WARD, 1932, Australian Zoologist, VII, p. 240. (Loc.: Capricorn Group.)

MATERIAL.—Seventeen males from 5 to 8.5 mm. and twelve females from 5 to 9 mm. in maximum carapace width. Mata-

[1] Subfamilies are omitted owing to the unsatisfactory state of the classification.

atu Harbour, Savaii Island, Samoa, from broken coral specimens, some of which were brought from a depth of 3 to 5 and 8 feet, Oct. 14 to 17, 1936.

ATERGATOPSIS A. MILNE-EDWARDS

Atergatopsis A. MILNE-EDWARDS, 1862, Ann. Sci. Nat., (4) XVIII, p. 43; 1865, Nouv. Arch. Mus. Hist. Nat. Paris, I, p. 252.

TYPE.—*Atergatopsis signatus* (White), 1847.

Atergatopsis crockeri, new species

Figures 7 and 8

Carapace broader than long, convex in both directions. The regions are clearly demarcated by broad and shallow sulci; the surface is microscopically granulated and punctate.

The anterolateral margins are divided into four broad and rounded lobes excluding the external orbital angles, which are separated from the first lobe by a shallow V-shaped incision; the last lobe of the anterolateral margin is the smallest. The posterolateral margins are shorter than the anterolateral, and are convex in outline.

The front is divided into four lobes of which the lateral pair are declivous and small, forming one side of the orbital hiatus and fused with the base of the antenna; the median lobes are rounded, separated by a narrow fissure and produced strongly. The orbits are comparatively small, the upper border thick and entire, a closed fissure at the external angle; the lower border is also thick, having the inner angle produced as an obtuse tooth visible from a dorsal view.

The antennal flagella stands in the orbital hiatus. The antennulary fossae are large, the antennules robust. The epistome is well developed. The buccal orifice is almost closed by the external maxillipeds.

The chelae are equal in size, the merus is not produced beyond the anterolateral margins of the carapace; the carpus is longer than the upper border of the manus, smooth and with two well-developed blunt teeth on the inner angle. The manus is broader than the length of the upper border. The outer surface is finely granulated, the granules forming a veinose pattern. The fingers are compressed and meet for the greater part of their length when closed. The immobile finger has three large teeth, the dactylus four of small size.

The ambulatory legs are robust, the distal articles slightly compressed. The dactyli are clothed with velvety pubescence and scattered long hairs, the tips are corneus and brown in color.

The sternal surface is punctate with microscopic granulations.

Atergatopsis crockeri is allied to *A. signata* (Adams and White), Mauritius, and may be separated by the following characters:

1.—The carapace is comparatively longer in *A. crockeri.*
2.—The inter-regional sulci on the dorsal surface of the carapace are deeper in *A. crockeri.*
3.—The median lobes of the front are more produced in *A. crockeri.*
4.—The external maxillipeds close the buccal frame in *A. signatus.*
5.—The fingers of the chelae are longer in *A. crockeri.*
6.—The ambulatory legs are longer and more robust in *A. crockeri.*

The only other species of *Atergatopsis* described from the central Pacific is *A. lucasi* Montrouzier, from New Caledonia. *A. crockeri* differs from *A. lucasi* in the following characters:

1.—The carapace of *A. crockeri* is smooth to the unaided eye, whereas in *A. lucasi* it is coarsely granulated.
2.—The ambulatory legs of *A. lucasi* are hairy, whereas they are bare in *A. crockeri.*

MATERIAL.—Holotype male (Cat. No. A.M.N.H. 7455), 78 mm. in maximum carapace width. Jervis Island, south of Christmas Island, on the beach, Nov. 2, 1936.

LOPHOZOZYMUS A. MILNE-EDWARDS

Lophozozymus A. MILNE-EDWARDS, 1863, Ann. Sci. Nat. Zool., (4) XX, p. 272.

TYPE.—*L. incisus* (H. Milne-Edwards) from Australia.

Lophozozymus edwardsi Odhner

Lophozozymus edwardsi ODHNER, 1925, K. Vet. Vitt. Sam. Handl., XXIX, p. 82.

MATERIAL.—One female 33 mm. in maximum carapace width. Penrhyn Island Lagoon, Sept. 20, 1936.

Lophozozymus intonsus (Randall)

Xantho intonsus RANDALL, 1839, Journ. Acad. Nat. Sci. Phila., VIII, p. 113. (Loc.: Hawaii.)

Lophozozymus intonsus RATHBUN, 1906, Bull. U. S. Fish. Comm. for 1903, part III, p. 846, Pl. VIII, fig. 8. (Loc.: Hawaii.)

MATERIAL.—One male 49 mm. in maximum carapace width. Kapapa Inlet, Kaneohe Bay, Oahu, Hawaii, collected by Ted Dranga at night, in tide pools, Nov. 1936.

XANTHIAS RATHBUN

Xanthias RATHBUN, 1930, Bull. No. 152, U. S. Nat. Mus., p. 464.

LOGOTYPE.—*Xanthias lamarckii* (H. Milne-Edwards) from Mauritius.

Xanthias minutus (Rathbun)

Xanthodes minutus RATHBUN, 1893, Proc. U. S. Nat. Mus., XVI, p. 238.

Xanthias minutus RATHBUN, 1906, Bull. U. S. Fish. Comm. for 1903, part III, p. 855, Pl. IX, fig. 14. (Loc.: Hawaii.)

MATERIAL.—One male 7 mm. in maximum carapace width. Eastern reef, Mataatu Harbour, Savaii Island, Samoa, Oct. 15, 1936.

Xanthias punctatus samoensis, new subspecies

Figures 9 and 10

Xanthias punctatus (H. Milne-Edwards) was described originally from Mauritius, and I have material from the Chagos Archipelago in the Indian Ocean which I am considering as typical *Xanthias punctatus*. The following notes are based upon a comparison of the holotype of *samoensis* and the Chagos material.

1.—The carapace is less transverse in *samoensis*.
2.—The last segment of the female abdomen is broader and shorter in *samoensis*.
3.—The front is comparatively narrower in *samoensis*.
4.—The sulci on the dorsal surface of the carapace are deeper in *punctatus*.
5.—The dactyli of the ambulatory legs are longer and thinner in *punctatus*.
6.—The lower orbital border is more deeply concave in *punctatus*.

MATERIAL.—Holotype (Cat. No. A.M. N.H. 7488), female 20 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, Oct. 17, 1936. Collected from crevice in coral (brought up from a depth of 8 feet) by pounding it up.

ACTAEA DE HAAN

Actaea DE HAAN, 1833, Crust.: in Siebold, Fauna Japonica, pp. 4, 18.

Actaea (part) RATHBUN, 1930, Bull. No. 152, U. S. Nat. Mus., p. 250.

LOGOTYPE.—*Actaea savignyi* (H. Milne-Edwards), 1834. Specified by Rathbun, 1930.

TYPE LOCALITY.—Red Sea.

Actaea cavipes (Dana)

Actaeodes cavipes DANA, 1852, Proc. Acad. Nat. Sci. Phila., p. 78; 1852, U. S. Explor. Exped., Crust., I, p. 199; 1855, Atlas, Pl. XL, figs. 5*a*, 5*b*. (Loc.: Fiji, Samoa.)

Actaea cavipes WARD, 1932, Australian Zoologist, VII, p. 246. (Loc.: Capricorn Group, Queensland.)

MATERIAL.—Five males from 8 to 11 mm. and two females from 8 to 9.5 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, Oct. 13 to 17, 1936, from broken up coral heads, some of which were brought from a depth of 8 feet.

Actaea speciosa (Dana)

Actaeodes speciosus DANA, 1852, U. S. Explor. Exped., Crust., I, p. 198; 1855, Atlas, Pl. XI, fig. 4. (Loc.: Samoa.)

Actaea speciosa (part) WARD, 1932, Australian Zoologist, VII, p. 247.

I have compared this material with the type of *Actaea perlata* (MacLeay) housed in the MacLeay Museum, Sydney. The two species are closely allied but *A. speciosa* may always be recognized by the more precise inter-regional sulci on the dorsal surface of the carapace, in the more developed granules and in the comparatively longer and narrower carapace. The two species are also widely separated geographically. *A. perlatus* (MacLeay) is known from the eastern coast of Africa and Mauritius. *A. speciosa* (Dana) is from the central Pacific.

MATERIAL.—Four males 13 to 14 mm. in maximum carapace width and seven females 10 to 17 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, Oct. 14 to 17, 1936, from broken up coral heads some of which were brought from depths of 3 to 5 and 8 feet.

Actaea garretti Rathbun

Actaea garretti RATHBUN, 1906, Bull. U. S. Fish. Comm. for 1903, part III, p. 852, Pl. IX, fig. 8. (Loc.: Hawaiian Islands.)

MATERIAL.—One female 9 mm. in maximum carapace width. Eastern reef, Mataatu Harbour, Savaii Island, Samoa, collected from broken up corals.

BANAREIA A. MILNE-EDWARDS

Banareia A. MILNE-EDWARDS, 1869, Ann. Soc. Entom. France, (4) IX, p. 168.

HAPLOTYPE.—*Banareia armata* A. Milne-Edwards from New Caledonia.

Odhner, 1924, in his study of the Xanthidae, unites *Banareia* with *Actaea* de Haan. After careful study of considerable material combined with field observation, I find that I cannot agree with Odhner's action and consequently retain *Banareia* as a distinct genus.

Banareia nobili (Odhner)

Actaea nobili ODHNER, 1924, K. Vet. Vitt. Sam. Handl., XXIX, part I, p. 70, Pl. IV, fig. 15.

This identification is tentative, pending the examination of material from the Red Sea.

MATERIAL.—One female 18 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, collected from broken up corals brought from a depth of 3 to 5 feet, Oct. 16, 1936.

LYDIA GISTEL

Lydia GISTEL, 1848, Naturg. Thierreichs, p. 9.
Lydia RATHBUN, 1906, Bull. U. S. Fish. Comm. for 1903, part III, p. 862 (footnote).

HAPLOTYPE.—*Lydia annulipes* (H. Milne-Edwards).

TYPE LOCALITY.—Unknown.

Two distinct species are known to me by personal examination. One inhabits the Indian Ocean and the second the central Pacific. I have considered the species from the Indian Ocean as being the *L. annulipes* of H. Milne-Edwards, so that the species which was recorded by Dana from the central Pacific requires a new name.

Lydia danae, new name

Figures 11 and 12

Ruppellia annulipes DANA (nec H. Milne-Edwards), 1852, U. S. Explor. Exped., Crust., I, p. 246. (Loc.: Charlotte Island, Kingsmill Group and Tahiti); 1855, Atlas, Pl. XIV, fig. 4*a*.

Lydia danae differs from *Lydia annulipes* (H. Milne-Edwards) in the following characters:

1.—The carapace is more convex and more transverse in *L. annulipes*.
2.—The teeth of the anterolateral margins of the carapace are more acute in *L. danae*.
3.—The chelipeds are smoother in *L. danae*.
4.—The sulci on the dorsal surface of the carapace are more sharply defined in *L. danae*.

MATERIAL.—Two females 23 and 24 mm. in maximum carapace width. Penrhyn Island, reef on the ocean side, Sept. 30, 1936.

LEPTODIUS A. MILNE-EDWARDS

Leptodius A. MILNE-EDWARDS, 1863, Ann. Sci. Nat., (4) XX, p. 284.

LOGOTYPE.—*Leptodius exaratus* (H. Milne-Edwards), 1834. Specified by Rathbun, 1930, Bull. 152, U. S. Nat. Mus., p. 296.

TYPE LOCALITY.—Coasts of India.

Leptodius nodosus (Randall)

Lagostoma nodosa RANDALL, 1839, Journ. Acad. Nat. Sci. Phila., VIII, p. 111. (Loc.: Hawaii.)
Xantho (Leptodius) sanguineus (part) ALCOCK, 1898, Journ. Asiat. Soc. Bengal, LXVII, p. 120.
Leptodius sanguineus RATHBUN (nec references), 1906, Bull. U. S. Fish. Comm. for 1903, part III, p. 847. (Loc.: Hawaii.)

I have compared the specimen here recorded with a typical specimen of *Leptodius sanguineus* (H. Milne-Edwards) from the type locality (Mauritius). The following characters serve to differentiate the two species:

1.—The anterior half of the carapace is more strongly convex in *L. nodosus*.
2.—The inter-regional sulci on the dorsal surface of the carapace are deeper in *sanguineus*.
3.—The upper surface of the larger manus is more rugose in *nodosus*.
4.—The orbital hiatus is more open and the basal article of the antenna extends further into it in *nodosus*.

MATERIAL.—One male 26 mm. in maximum carapace width. Penrhyn Island Lagoon, Sept. 20, 1936.

Leptodius gracilis (Dana)

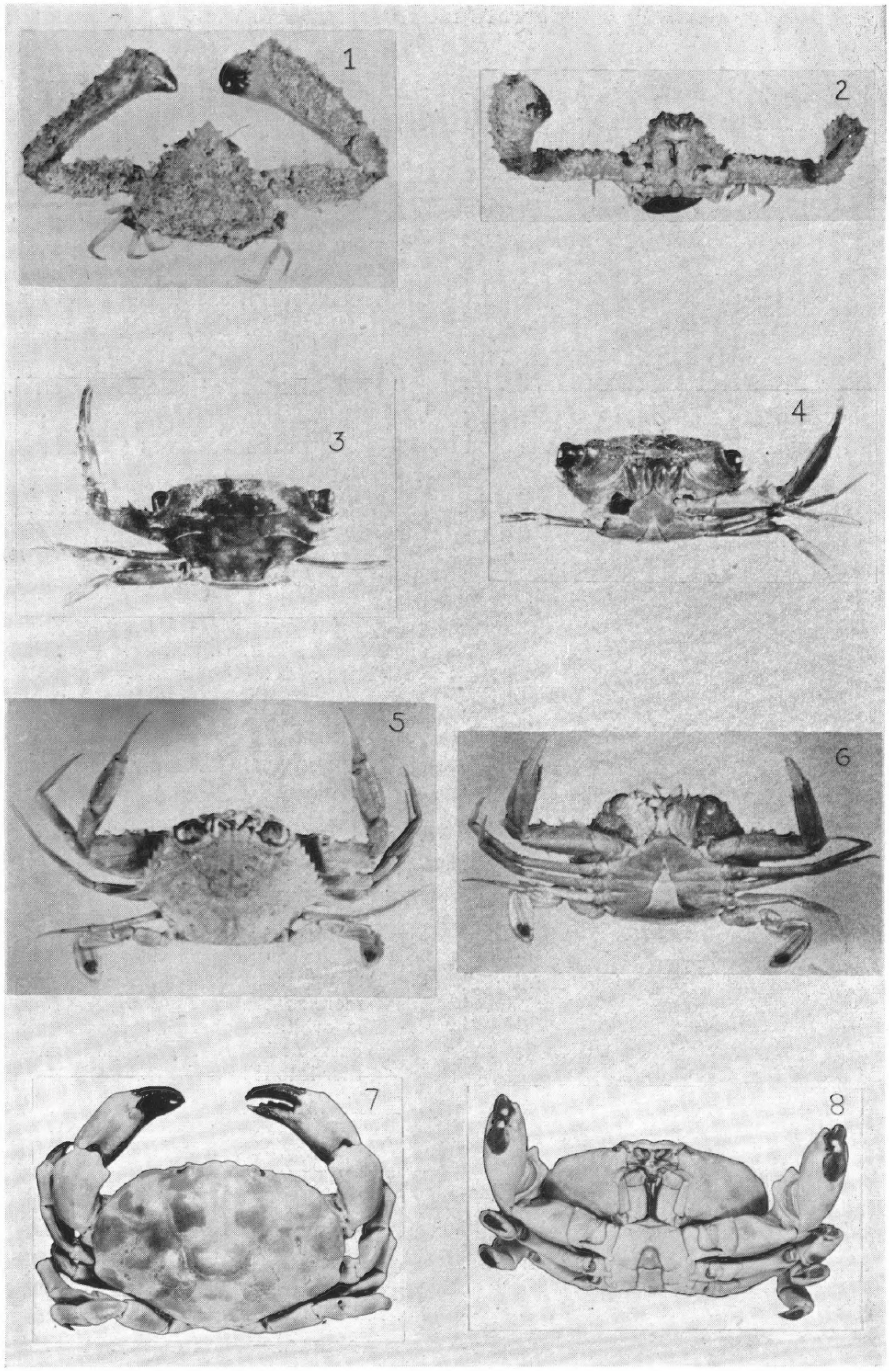
Chlorodius gracilis DANA, 1852, U. S. Explor. Exped., Crust., I, p. 210; 1855, Atlas, Pl. XI, fig. 13*a*–13*e*. (Loc.: Wake Island.)

MATERIAL.—One female 7 mm. in maximum carapace width. Eastern reef, Mataatu Harbour, Savaii Island, Samoa, Oct. 15, 1936, collected from broken up coral heads.

PHYMODIUS A. MILNE-EDWARDS

Phymodius A. MILNE-EDWARDS, 1863, Ann. Sci. Nat., (4) XX, p. 283.

LOGOTYPE.—*P. ungulatus* (H. Milne-

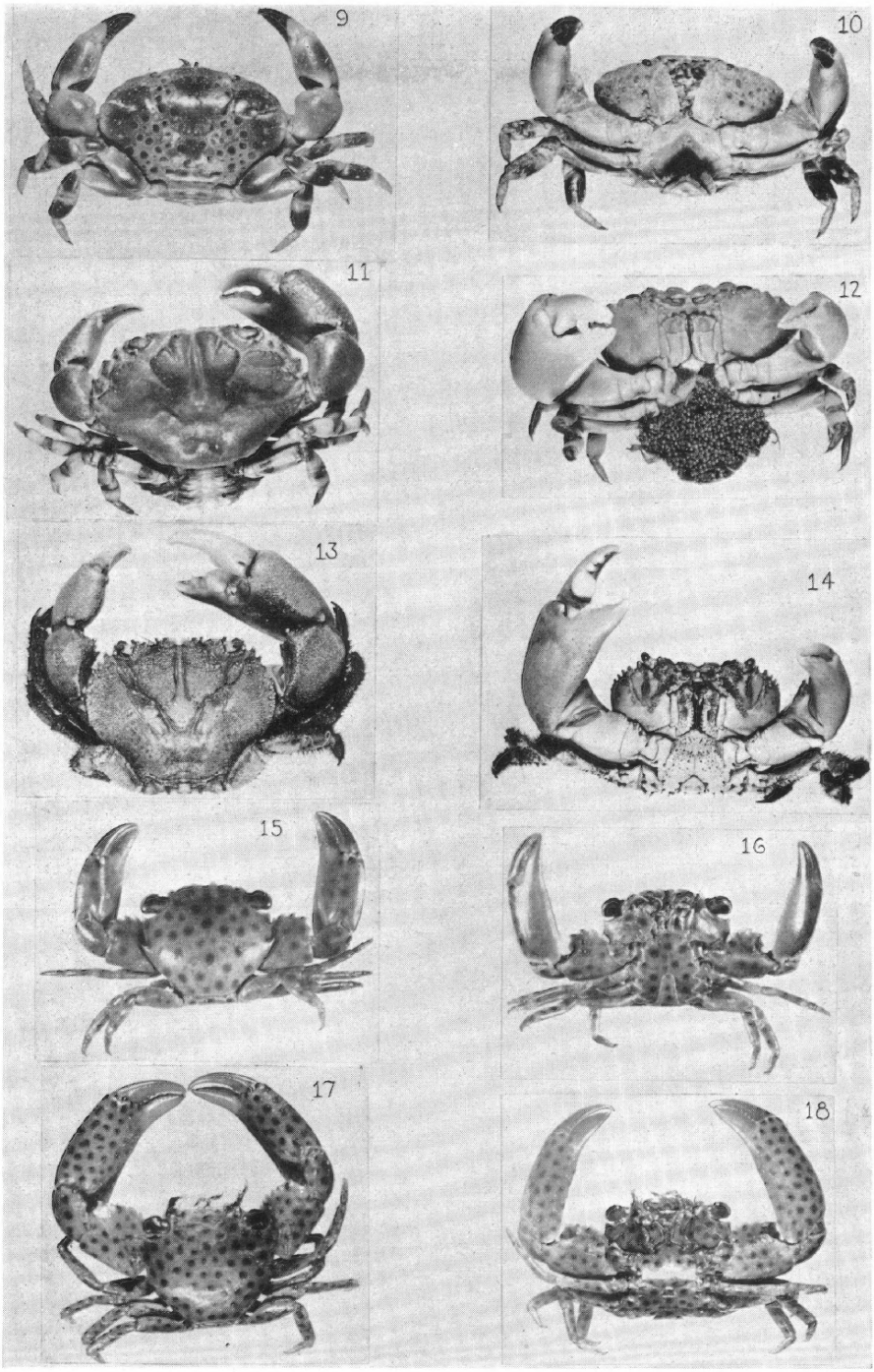


Platylambrus ursus, n. sp. Mataatu Harbour, Savaii Is . Samoa.
Fig. 1, Dorsal view. Fig. 2, Ventral view. Holotype, male, 7 mm. max. carapace width.

Thalamitoides alphonsei, n. name. Mataatu Harbour, Savaii Isl., Samoa.
Fig. 3, Dorsal view. Fig. 4, Ventral view. Male, 13 mm. max. carapace width.

Monomia samoensis, n. sp. Pago Pago Harbour, Samoa.
Fig. 5, Dorsal view. Fig. 6, Ventral view. Holotype, male, 15.5 mm. max. carapace width.

Atergatopsis crockeri, n. sp. Jervis Isl.
Fig. 7, Dorsal view. Fig. 8, Ventral view. Holotype male, 78 mm. max. carapace width.



Xanthias punctatus samoensis, n. subsp. Mataatu Harbour, Savaii Isl., Samoa.
Fig. 9, Dorsal view. Fig. 10, Ventral view. Holotype, female, 20 mm. max. carapace width.

Lydia danae, n. name. Penrhyn Isl. (specimen in Ward Coll., Sydney).
Fig. 11, Dorsal view. Fig. 12, Ventral view. Ovigerous female, 24 mm. max. carapace width.

Eriphia sebana hawaiiensis, n. subsp. Honolulu, Hawaii.
Fig. 13, Dorsal view. Fig. 14, Ventral view. Holotype, male, 67 mm. max. carapace width.

Trapezia tigrina Eydoux and Souleyet. Mataatu Harbour, Savaii Isl., Samoa (specimen in Ward Coll., Sydney).
Fig. 15, Dorsal view. Fig. 16, Ventral view. Male, 9 mm. max. carapace width.

Trapezia danae, n. name. Mataatu Harbour, Savaii Isl., Samoa (specimen in Ward Coll., Sydney).
Fig. 17, Dorsal view. Fig. 18, Ventral view. Male, 12 mm. max. carapace width.

Edwards). Specified by Rathbun, 1930, Bull. No. 152, U. S. Nat. Mus., p. 249.

TYPE LOCALITY.—Australasia.

Phymodius ungulatus (H. Milne-Edwards)

Chlorodius ungulatus H. MILNE-EDWARDS, 1834, Hist. Nat. Crust., I, p. 400; Atlas, Pl. XVI, figs. 6–8.

MATERIAL.—One male 18.5 mm. and one female 17.5 mm. on maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, Oct. 14, 1936, collected from broken up corals.

PSEUDOZIUS DANA

Pseudozius DANA, 1851, American Journ. Sci., (2) XII, p. 127.

Pseudozius DANA, 1852, U. S. Explor. Exped., Crust., I, 233.

LOGOTYPE.—*P. caystrus* (Adams and White).

TYPE LOCALITY.—Maria Orientalia.

In 1932,[1] I specified, as the type of *Pseudozius*, *P. caystrus* Adams and White, 1849, at the same time giving *P. planus* (Dana, 1851) as a synonym. Later, 1934,[2] in writing on *P. caystrus* (Adams and White), I referred to *P. planus* Dana as the type of *Pseudozius* and remarked that two distinct species were probably involved; in this later work I overlooked the fact that I had already specified *P. caystrus* as the type of *Pseudozius* Dana.

Pseudozius inornatus Dana

Pseudozius inornatus DANA, 1852, U. S. Explor. Exped., Crust., I, p. 234; 1855, Atlas, Pl. XIII, fig. 7. (Loc.: Hawaii.)

MATERIAL.—One male 10 mm. in maximum carapace width. Penrhyn Island, no other data, Sept. 24, 1936.

LYBIA H. MILNE-EDWARDS

Lybia H. MILNE-EDWARDS, 1834, Hist. Nat. Crust., I, p. 431. (Not *Lybius* Hermann, 1783.)

Melia LATREILLE, 1827, in Berthold, Faun. Nat. Thierr., p. 255; 1828, Encyc Méth. (Ins.), X, (2), p. 705. (Not *Melia* Risso, 1813.)

Lybia RATHBUN, 1904, Proc. Biol. Soc. Washington, XVII, p. 102.

HAPLOTYPE.—*Melia tesselata* (Latreille).

TYPE LOCALITY.—Mauritius.

Lybia tesselata (Latreille)

Grapsus tessellatus LATREILLE, 1812, in J. Milbert, Voy. Ile de France, II, p. 275.

Grapsus tresselatus LATREILLE, 1818, Encyc. Meth., Pl. 305, fig. 2.

Lybia tesselata RATHBUN, 1906, Bull. U. S. Fish. Comm. for 1903, part III, p. 866. (Loc.: Hawaii.)

MATERIAL.—One female 23 mm. in maximum carapace width. Eastern reef, Mataatu Harbour, Savaii Island, Samoa, Oct. 15, 1936, collected from broken up coral heads.

CHLORODOPSIS A. MILNE-EDWARDS

Chlorodopsis A. MILNE-EDWARDS, 1873, Nouv. Arch. Mus. Hist. Nat., Paris, IX, p. 227.

LOGOTYPE.—*Chlorodopsis melanochirus* A. Milne-Edwards. Specified by Ward, 1934, Bull. Raffles Mus., IX, p. 21.

TYPE LOCALITY.—New Caledonia.

Chlorodopsis pugil (Dana)

Pilodius pugil DANA, 1852, U. S. Explor. Exped., Crust., I, p. 219. (Loc.: Upolu, Samoa.)

Chlorodopsis spinipes WARD (nec Heller), 1932, Australian Zoologist, VII, p. 251. (Loc.: Capricorn Group.)

MATERIAL.—One male 10 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, Oct. 18, 1936, collected from broken up coral brought from a depth of 6 feet.

CHLORODIELLA RATHBUN

Chlorodiella RATHBUN, 1897, Proc. Biol. Soc. Washington, XI, p. 157.

HAPLOTYPE.—*Chlorodiella niger* (Forskål), from Djidda, Red Sea.

Chlorodiella barbata (Borradaile)

Chlorodius barbatus BORRADAILE, 1900, Proc. Zool. Soc. London, p. 587, Pl. XII, fig. 4. (Loc.: Rotuma.)

Chlorodiella barbata WARD, 1932, Australian Zoologist, VII, p. 250.

MATERIAL.—Three males 5 and 6 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, Oct. 18, 1936, collected from broken up coral brought from a depth of 6 feet.

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[1] Ward, 1932, Australian Zoologist, VII, p. 251.
[2] Ward, 1934, Bull. Raffles Mus., IX, p. 23.

Chlorodiella asper Edmondson

Chlorodiella asper Edmondson, 1925, Bull. Bishop Mus., XXVII, p. 44, Figs. 7*e*–7*i*, Pl. III, fig. C, 7, i. (Loc.: Johnston Island.)

Material.—Two females 4 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, Oct. 15, 1936, from broken up coral heads.

Chlorodiella cytherea (Dana)

Chlorodius cytherea Dana, 1852, U. S. Explor. Exped., Crust., I, p. 213; 1855, Atlas, Pl. XII, fig. 2. (Loc.: Raraka, Paumotu.)

Chlorodius laevissimus Dana, 1852, U. S. Explor. Exped., Crust., I, p. 215; 1855, Atlas, Pl. XII, fig. 4. (Loc.: Hawaii.)

The material before me suggests that this is a very variable species inhabiting the central Pacific region. I have used *C. cytherea* in preference to *C. laevissimus* as it was first so named by Dana.

Material.—Fifty-one males from 4 to 10 mm. and eighteen females 4.5 to 13 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, Oct. 13 to 18, 1936, collected from broken up corals some of which were brought from depths of 3 to 8 feet.

Daira de Haan

Daira de Haan, 1833, Crust.: in Siebold, Fauna Japonica, pp. 4–18.

Daira Rathbun, 1930, Bull. No. 152, U. S. Nat. Mus., p. 268.

Haplotype.—*Cancer* (*Daira*) *perlatus* de Haan, 1833 = *Cancer perlatus* Herbst, 1790 = *Cancer daira* Herbst, 1801.

Daira perlata (Herbst)

Cancer perlatus Herbst, 1790, Krabben u. Krebse, I, p. 265, Pl. XXI, fig. 122. (Locality unknown.)

Material.—Four females from 43 to 51 mm. in maximum carapace width. Penrhyn Island, Sept. 30, 1936, collected on the reef on the ocean side.

Eriphia Latreille

Eriphia Latreille, 1817, Nouv. Dict. Hist. Nat., p. 404.

Logotype.—*Eriphia spinifrons* Latreille, 1817 = *Cancer spinifrons* Herbst, 1785. Specified by Rathbun, 1930, Bull. No. 152, U. S. Nat. Mus., p. 545.

Eriphia sebana hawaiiensis, new subspecies

Figures 13 and 14

This subspecies differs from the typical *Eriphia sebana* (Shaw) which is an inhabitant of the East Indies, by the following characters:

1.—The anterior surfaces of the carapace are more coarsely granulated in *hawaiiensis*.
2.—The basal tooth on the dactylus of the larger cheliped is greater in size than in *sebana*.
3.—The ambulatory legs of *hawaiiensis* are more robust.

Material.—One holotype (Cat. No. A.M.N.H. 7615), 67 mm. in maximum carapace width.

I have personally examined the following subspecies of *Eriphia sebana* (Shaw): *Eriphia sebana* (Shaw), Singapore; *Eriphia sebana laevimana* Latreille, Mauritius; *Eriphia sebana trapeziformis* Hess, Fiji.

Material.—One male measuring 67 mm. in maximum carapace width. Honolulu, Hawaii, Nov. 1936, purchased in the native market.

Cymo de Haan

Cymo de Haan, 1833, Crust.: in Siebold, Fauna Japonica, pp. 5, 22.

Type.—*Cancer* (*Cymo*) *andreossyi* de Haan, 1833 = *Pilumnus andreossyi* Audouin, 1825.

Cymo melanodactylus savaiiensis, new subspecies

Cymo melanodactylus savaiiensis differs from the typical species in the following characters:

1.—The regions of the carapace are more distinctly demarcated in *savaiiensis*.
2.—The spines on the front are larger and the median fissure is deeper in *savaiiensis*.
3.—The carapace is narrower, more convex transversely, and sparsely covered with clavate hairs in *savaiiensis*.
4.—The black color on the lower border of the smaller hand extends almost to the proximal articulation in *savaiiensis*.

Material.—Holotype male (Cat. No. A.M.N.H. 7498), measuring 10 mm., five males from 7 to 13 mm. and four females 9.5 to 12.5 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, Oct. 13 to 18, 1936, collected from

broken up corals, some of which were brought from 8 feet.

Cymo andreossyi (Andouin)

Pilumnus andreossyi Andouin, 1825, Descr. de l'Egypt, Crust., p. 86, Pl. v, fig. 5.

Cymo andreossyi Alcock, 1898, Journ. Asiat. Soc. Bengal, LXVII, part 2, p. 173.

Cymo andreossyi Ward, 1932, Australian Zoologist, VII, p. 251.

The identification of this species is tentative, pending the examination of material from the coast of Egypt.

Material.—Ten males 6 to 12.5 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, Oct. 13 to 18, 1936, collected on the eastern and western reefs from broken up corals, some of which were brought from 8 feet.

Domecia Eydoux and Souleyet

Domecia Eydoux and Souleyet, 1842, Voy. Bonite, I, Crust., p. 234.

Haplotype.—*D. hispida* Eydoux and Souleyet, 1842.

Type Locality.—Hawaii.

Domecia hispida Eydoux and Souleyet

Domecia hispida Eydoux and Souleyet, 1842, Voy. Bonite, I, Crust., p. 235, Pl. ii, figs. 5–10. (Loc.: Hawaii.)

Material.—One male 8 mm. in maximum carapace width and four females 9 to 13 in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, Oct. 14, 16, 17, 1936, from broken up corals, some of which were brought from a depth of 8 feet.

Trapezia Latreille

Trapezia Latreille, 1825, Encyc. Method., X, p. 695.

Logotype.—*T. cymodoce* (Herbst), 1801. Specified by Rathbun, 1930, Bull. 152, U. S. Nat. Mus., p. 556.

Type Locality.—East Indies.

In studying the Crocker Collection of species of *Trapezia* I have been greatly assisted by considerable amount of material from many parts of the Indo-Pacific region, including the Philippine Islands, Papua, Singapore, Ceylon, Chagos Archipelago, Great Barrier Reef, Queensland, Hawaii and the Galapagos Islands. The MacLeay Museum in the University of Sydney possesses the original material of *Trapezia maculata* MacLeay, 1838, *Trapezia subinteger* MacLeay, 1838 and *Trapezia dentata* MacLeay, 1838, from South Africa, and I am indebted to the curator of the collection for access to this valuable material.

After careful examination of all these collections I am of the opinion that there are more valid species than Ortman[1] allowed in his monograph of the Trapeziidae, and that there are groups of species confined to certain defined provinces within the Indo-Pacific region. The species in the Crocker Collection are characteristic of the central Pacific and belong to species already described.

Trapezia areolata Dana

Trapezia areolata Dana, 1852, U. S. Explor. Exped., Crust., I, p. 259; 1855, Atlas, Pl. xv, fig. 18. (Loc.: Tahiti.)

I have compared this species with *T. reticulata* Stimpson from the Philippines. The following characters serve to differentiate the two species:

1.—The lateral teeth of the front are more pronounced in *T. areolata.*
2.—The teeth on the anterior margin of the merus of the cheliped are more numerous in *T. areolata.*
3.—The carapace is comparatively broader in *T. reticulata.*

Material.—Eighteen males from 5 to 15 mm. and thirty females from 6 to 13 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, Oct. 14 to 18, 1936, collected from broken up corals from both the eastern and western reefs and down to a depth of 8 feet.

Trapezia miniata Lucas

Trapezia miniata Lucas, 1853, in Jacq. and Lucas, Voy. au Pole Sud, Astrolabe and Zelee, Crust., III, pp. 3, 44, Pl. iv, fig. 10. (Loc.: Noukahiva, Marquesas.)

Material.—Twenty-two males from 7 to 15 mm. and twenty females from 8 to 16 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa. Oct. 15 to 17, 1936, from broken up corals, some of which came from a depth of 8 feet.

[1] 1897, Zoolog. Jahrb. Syst., IX, pp. 201–216.

Trapezia hirtipes Lucas

Trapezia hirtipes Lucas, 1853, in Jacq. and Lucas, Voy. au Pole Sud, Astrolabe and Zelee, Crust., III, pp. 3, 44, Pl. iv, fig. 14. (Loc.: Noukahiva, Marquesas.)

Trapezia hirtipes differs from *T. cymodoce* (Herbst) in the following characters:

1.—The orbits are smaller in *hirtipes*.
2.—The frontal teeth of the carapace are less developed in *hirtipes*.
3.—The teeth on the anterior margin of the merus of the cheliped are differently shaped in *hirtipes*.
4.—The abdomen of the male is different in *hirtipes*.

Material.—Eight males from 8 to 12 mm. and eight females from 5 to 14 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, Oct. 15 to 17, 1936, collected from broken up corals on the eastern and western reef and from coral brought from a depth of 8 feet.

Trapezia tigrina Eydoux and Souleyet

Figures 15 and 16

Trapezia tigrina Eydoux and Souleyet, 1841, Voy. Bonite, Zool., V, p. 232.

Trapezia tigrina is near *T. rufopunctata* (Herbst). I have material of the latter from Mauritius. Rathbun, 1906, published a figure of the type housed in the Berlin Museum. *T. tigrina* differs from *T. rufopunctata* in the following characters:

1.—The frontal teeth are not as acuminate in *T. tigrina*.
2.—The lower margin of the manus of the cheliped is smooth in *tigrina*.
3.—The external orbital angle is not as produced in *tigrina*.
4.—The proportions of the carapace are different.

T. tigrina differs from *T. maculata* MacLeay (nec Dana) in the following characters:

1.—The carapace is comparatively less transverse in *tigrina*.
2.—The frontal teeth are differently shaped.
3.—The spots are smaller and more numerous on the chelae of *tigrina*.

Material.—Three males 8 and 9 mm. and three females 8 to 10 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, Oct. 15, 16, 1936, collected from the eastern and western reefs from broken up corals, some of which were brought from a depth of 8 feet.

Trapezia danae, new name

Figures 17 and 18

Trapezia maculata Dana, 1852 (nec MacLeay), U. S. Explor. Exped., Crust., I, p. 256; 1855, Atlas, Pl. xv, fig. 4. (Loc.: Tahiti and Hawaii.)

Trapezia danae differs from *Trapezia maculata* in the following characters:

1.—The carapace is more elongated in *T. danae*.
2.—The teeth of the front are less developed in *T. danae*.
3.—The spots on the carapace and chelae are smaller in *T. danae*.

Material.—Two males 11 and 12 mm. in maximum carapace width and two females 13 and 15 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, Oct. 16, 17, 1936, collected from broken up corals brought up from a depth of 3 to 5 and 8 feet on the western reef.

Tetralia Dana

Tetralia Dana, 1851, Amer. Journ. Sci., (2) XII, p. 128.
Tetralia Alcock, 1898, Journ. Asiat. Soc. Bengal, LXVII, part 2, p. 223.

Logotype.—*Tetralia glaberrima* (Herbst) = *T. nigrifrons* Dana.

Tetralia glaberrima (Herbst)

Cancer glaberrimus Herbst, 1796, Krabben u. Krebse, I, pp. ii, 262, Pl. xx, fig. 115.
Tetralia glaberrima Alcock, 1898, Journ. Asiat. Soc. Bengal, LXVII, part 2, pp. 11, 1, 223.

Unfortunately I have no material of this species from the coasts of India for comparison with the Samoan specimens and, therefore, I have not attempted to uphold the validity of the central Pacific species. However, in view of the fact that the allied genus *Trapezia* is represented by endemic species, it is very probable that the *Tetralia* here recorded as *T. glaberrima* will prove to be another species.

Material.—Fifty-one males from 5 to 12 mm. and forty females from 5.5 to 13 mm. in maximum carapace width. Mataatu Harbour, Savaii Island, Samoa, Oct. 14 to 18, 1936.

The species occurred on the eastern and western reefs and was collected by smashing up corals, some of which were brought up from a depth of 8 feet.

Grapsidae

CYCLOGRAPSUS H. MILNE-EDWARDS

Cyclograpsus H. MILNE-EDWARDS, 1837, Hist. Nat. Crust., II, p. 78.

LOGOTYPE.—*C. punctatus* H. Milne-Edwards, 1837. Specified by Rathbun, 1918, Bull. 97, U. S. Nat. Mus., p. 325.

TYPE LOCALITY.—Indian Ocean.

Cyclograpsus minutus Lucas

Cyclograpsus minutus LUCAS, 1853, in Jacq. and Lucas, Voy. au Pole Sud, Astrolabe and Zelee, Crust., III, p. 3, Pl. VI, fig. 3, H.

Lucas gives Chili as the type locality of *C. minutus* but the species has not since been recorded from South America. On the other hand, the specimen before me agrees with the description and figure and I therefore consider Lucas' locality an error.

MATERIAL.—One ovigerous female 7 mm. in maximum carapace width. Penrhyn Island (no other data), Sept. 24, 1936.

PLANES LEACH

Planes BOWDICH, 1825, Excursions in Madeira and Porto Santo, pp. xi and 15, Pl. XIII, figs. 2A and 2B. (Fide Rathbun.)

Planes RATHBUN, 1918, Bull. 97, U. S. Nat. Mus., p. 253.

HAPLOTYPE.—*P. clypeatus* Bowdich = *P. minutus* (Linnaeus).

Planes cyaneus Dana

Planes cyaneus DANA, 1852, U. S. Explor. Exped., Crust., I, p. 347; 1855, Atlas, Pl. XXII, fig. 1*a,g*. Lat. 28° N.; Long. 17° 40′ E.

Unfortunately I have no material of *Planes minutus* Linnaeus from the Atlantic Ocean with which to compare the present specimens, but a study of this material with a series from the coast of New South Wales, Australia, reveals many characters by which even these Pacific forms can be differentiated; consequently, I have no hesitation in upholding the validity of Dana's species.

MATERIAL.—Two males 11 mm. and one female 14.5 mm. in maximum carapace width. Taken at sea, Lat. 29° 20′ N.; Long. 141° 25′ W., Aug. 24, 1936.

Planes marinus Rathbun

Planes marinus RATHBUN, 1918, Bull. 97, U. S. Nat. Mus., p. 258, Pl. LXIV. (Loc.: Lower California and Mexico.)

MATERIAL.—Two males 6 and 8 mm. in maximum carapace width. Lat. 32° 00′ N., Long. 135° 20′ W.; Lat. 29° 20′ N., Long. 141° 25′ W., taken at the surface.

Gecarcinidae

CARDISOMA LATREILLE

Cardisoma LATREILLE, 1825, Encyc. Math. Hist. Nat. Entom., X, p. 685.

LOGOTYPE.—*Cardisoma guanhumi* Latreille.

TYPE LOCALITY.—Brazil. Specified by Rathbun, Bull. 97, U. S. Nat. Mus., p. 340.

Cardisoma urvillei H. Milne-Edwards

Cardisoma urvillei H. MILNE-EDWARDS, 1853, Ann. Sci. Nat. Zool., (3) XX, p. 204. (Loc.: Samoa.)

This species was relegated to the synonymy of *C. carnifex* (Herbst) Tranquebar by Alcock, but the material before me from Mauritius and Papua suggests that more than one species inhabits the Indo-Pacific.

MATERIAL.—One male 75 mm. in maximum carapace width. On sandy beach facing ocean, near London, Christmas Island, Sept. 14, 1936.

Cardisoma rotundatum (Quoy and Gaimard)

Thelphusa rotundatum QUOY AND GAIMARD, 1825, in Freycinet's Voyage Autour de Monde, III, Zool., p. 527, Pl. LXXVII, fig. 1.

Cardisoma rotundatum RATHBUN, 1906, Bull. U. S. Fish Comm. for 1903, part III, p. 838.

MATERIAL.—One female 91 mm. in maximum carapace width. Honolulu, Hawaii, Nov. 1936, purchased in the native market.

Ocypodidae

UCA LEACH

Uca LEACH, 1814, Edin. Encyc., VII, 430.

Uca RATHBUN, 1897, Proc. Biol. Soc. Washington, XI, p. 154.

HAPLOTYPE.—*Uca una* Leach, 1814 = *U. heterochelos* (Lamarck), 1801.

Uca duperryi (Guerin)

Gelasimus tetragonus GUERIN (nec Herbst), 1829, Voy. Coquille, Crust., II, pp. 9, 10.

Gelasimus duperryi GUERIN, Voy. Coquille, Crust., Pl. I, fig. 2. (Loc.: Borabora.)

Uca duperryi (Guerin) was relegated to the synonymy of *U. tetragona* (Herbst) by Guerin and later authors, but in consideration of the fact that I have a photograph of the type of *U. tetragona* (Herbst) from the Berlin Museum, in which difference of structure can be observed, I have reinstated Guerin's name.

U. duperryi differs from *U. tetragona* in the following characters:

1.—The frontal groove is broadly triangular in *tetragona*, narrow in *duperryi*.
2.—The anterolateral angles of the carapace are not so produced in *duperryi*.
3.—The proportions of the carapace are different.
4.—The ambulatory legs are longer and thinner in *duperryi*.

I have compared a specimen from Mauritius with the photograph of the type, the type locality of which was unknown to Herbst, and it appears to be the same species.

Material.—Fifteen males from 23 to 31.5 mm., one juvenile male 13 mm. and one female measuring 15 mm. in maximum carapace width. Penrhyn Island (lagoon side), Sept. 28, 1936.